Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-4. (canceled)

- 5. (currently amended) An isolated polynucleotide or complement thereof, the polynucleotide encoding a <u>soluble</u> polypeptide that <u>comprises</u> <u>eonsists essentially of</u> a <u>soluble</u> polypeptide selected from the group consisting of a <u>soluble</u>, PA-binding fragment of SEQ ID NO:2, a <u>soluble</u>, PA-binding fragment of SEQ ID NO:6, a <u>soluble</u>, PA-binding fragment of SEQ ID NO:10, and a fusion protein comprising any of the foregoing, the polynucleotide being unable to encode a polypeptide selected from the group consisting of SEQ ID NO:6, SEQ ID NO:8 and SEQ ID NO:10.
- 6. (currently amended) The isolated polynucleotide <u>or complement thereof</u> of claim [[5]] <u>22</u>, wherein the <u>soluble</u>, PA-binding fragment of SEQ ID NO:2 begins at any amino acid in the range from 27 to 43 and ends at any amino acid in the range from 221 to 321.

7-10. (canceled)

- 11. (previously presented) A vector comprising a polynucleotide selected from the group consisting of a polynucleotide of claim 5 and a polynucleotide that hybridizes under stringent or moderately stringent hybridization conditions to a polynucleotide of claim 5.
- 12. (original) The vector of claim 11, further comprising a non-native expression control sequence operably linked to the polynucleotide.
 - 13. (original) A host cell comprising a vector of claim 11.

14-18. (canceled)

19. (currently amended) A method for producing an anthrax toxin receptor, the method including the step of:

transcribing a polynucleotide that encodes a <u>soluble</u> polypeptide that <u>comprises</u> eonsists essentially of a <u>soluble</u> an anthrax toxin receptor operably linked to an upstream expression control sequence, the receptor being selected from the group consisting of a <u>soluble</u>, PA-binding fragment of SEQ ID NO:2, a <u>soluble</u>, PA-binding fragment of SEQ ID NO:6, a <u>soluble</u>, PA-binding fragment of SEQ ID NO:8, a <u>soluble</u>, PA-binding fragment of SEQ ID NO:10, and a fusion protein comprising any of the foregoing, to produce an mRNA; and

translating the mRNA to produce the anthrax toxin receptor.

- 20. (original) A method as claimed in Claim 19, wherein the polynucleotide is operably linked to the expression control sequence in an expression vector, and wherein the expression vector is delivered into a host cell, the expression control sequence being operable in the host cell.
- 21. (original) A method as claimed in Claim 19, wherein at least one of the transcribing and translating steps are performed in vitro.
- 22. (new) The isolated polynucleotide or complement thereof of claim 5, wherein the polynucleotide encodes a soluble polypeptide that comprises a soluble, PA-binding fragment of SEQ ID NO:2.
- 23. (new) The isolated polynucleotide or complement thereof of claim 5, wherein the polynucleotide encodes a soluble polypeptide that comprises a soluble, PA-binding fragment of SEQ ID NO:6, the polynucleotide being unable to encode SEQ ID NO:6.
- 24. (new) The isolated polynucleotide or complement thereof of claim 5, wherein the polynucleotide encodes a soluble polypeptide that comprises a soluble, PA-binding fragment of SEQ ID NO:8, the polynucleotide being unable to encode SEQ ID NO:8.

- 25. (new) The isolated polynucleotide or complement thereof of claim 5, wherein the polynucleotide encodes a soluble polypeptide that comprises a soluble, PA-binding fragment of SEQ ID NO:10, the polynucleotide being unable to encode SEQ ID NO:10.
- 26. (new) A method as claimed in Claim 19, wherein the anthrax toxin receptor is a soluble, PA-binding fragment of SEQ ID NO:2 that begins at any amino acid in the range from 27 to 43 and ends at any amino acid in the range from 221 to 321.